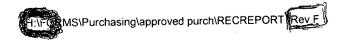
Receiving Report

	ate: 4-5-a	<u>)</u> 9.		Batch No: Dart P/O:	361	659 flef,	
Packing Slip: Invoice: Receipt: New Supplier	Yes No Yes No Cash Cr No No	- /- -/	Release N Waybill At Shipment QC18 Insp Work Orde	tached: Complete: pection	Yes	No No	N/A N/A N/A
Discrepancies Part Number	Description	Quantity	Quantity	Quantity	Quantity	Quantity	Comment / NCR Number
Part Number	Description	Ordered	Rec'd	Short	Inspected	Rejected	Number
					:		
				Initials of	Receiver	QC12	SP.
Production/Ad Date Received/Cost Initial						Location	





Dart Aerospace Ltd. 1270 Aberdeen Street Hawkesbury, ON K6A 1K7

Tel: 613 632 9577 Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID PO36464

Purchase Order Date 5/26/2017 PO Print Date 5/26/2017

Page Number 1 of 3

Order From:

USA

VU-EC001

MONROE AEROSPACE 399 EAST DRIVE MELBOURNE, FLORIDA 32904 Ship To:

DART AEROSPACE LTD

1270 ABERDEEN

HAWKESBURY, ON K6A 1K7

CANADA

Contact Name

Vendor Phone

1-321-727-0047

Buyer

Chantal Lavoie

Customer POID Customer Tax #

10127-2607

Ship To Contact

Ship To Phone

Terms Currency Net 30 USD

Ship Via: Ship Acct: FedEx Economy collect

FOB

FCA - (Free Carrier)

Extended Req Date/ CD Req Qty/ Description/ Line Reference Price Taxable Unit of Mfg ID Nbr Vendor Part Number Measure **Promise Date Line Comments Delivery Comments** \$200.00 \$0.40 500.00 (6/1/2017 **NUT PLATE** MS21075L3N Each Yes

6/1/2017 Yes

6/1/2017

6/1/2017

50.00

Line Total:

\$23.00

\$200.00

Line Total:

AN5-45

Bolt

6/1/2017

Yes

6/1/2017

24.00

Each

Each

\$2.60

\$62.40

\$23.00

Note:



Dart Aerospace Ltd. 1270 Aberdeen Street Hawkesbury, ON K6A 1K7

Tel: 613 632 9577 Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID PO36464

Purchase Order Date 5/26/2017 PO Print Date 5/26/2017

Page Number 3 of 3

Order From:

VU-EC001

DART AEROSPACE LTD Ship To:

HAWKESBURY, ON K6A 1K7

1270 ABERDEEN

MONROE AEROSPACE 399 EAST DRIVE

MELBOURNE, FLORIDA 32904 **USA**

Contact Name

Vendor Phone

1-321-727-0047

FedEx Economy collect

Screw

Buyer **Customer POID**

CANADA

Chantal Lavoie

Customer Tax#

10127-2607 Net 30

Ship To Contact

Ship To Phone

Terms Currency

FOB

USD FCA - (Free Carrier)

Ship Via: Ship Acct:

MS35207-268

6/1/2017

30.00

\$0.15

\$4.50

Yes

Each

Line Total:

10.00

6/1/2017

100X:

71401-45

PROCUREMENT QUALITY CLAUSES 6/1/2017

\$0.00

\$0.00

\$4.50

Procurement Quality Clauses

A005 RIGHT OF ENTRY

A012 CHEMICAL AND PHYSICAL TEST REPORTS

A016 PERSONNEL QUALIFICATION

A026 CERTIFICATION OF MATERIAL CONFORMANCE

A032 PUBLIC LAW 101-592 FASTENER QUALITY ACT

A033 STATEMENT OF CONFORMITY/TEST RECORDS

FOR NAS, AN and MS FASTENERS

A040 NOTIFICATION OF QUALITY ESCAPE

A041 QUALITY MANAGEMENT SYSTEM A043 RETENTION OF QUALITY DOCUMENT 6/1/2017

Nο

Line Total:

\$0.00

PO Total:

\$327.90

Note: Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit www.dartaerospace.com for further explanation.

Change Nbr:

Change Date:

5/26/2017



PACKING SLIP

INVOICE #: 601781

DATE PRINTED: 5/26/2017

TIME: 3:02:45 PM

OF ITEMS: 6 PAGE: 1

TO: DART AEROSPACE LTD.
ACCTS. PAYABLE
1270 ABERDEEN STREET
HAWKESBURY, ON K6A 1K7
CANADA

SHIP TO: DART AEROSPACE LTD.
ATTN: RECEIVING
1270 ABERDEEN STREET

HAWKESBURY, ON K6A 1K7

CANADA

ATTN: CHANTAL LAVOIE

Ph: 613.632.3336 Fax: 613.632.5246

INVOICE DATE: 5/26/2017

TERMS: NET 30

WEIGHT: 5.55

SHIP VIA: 113- FX INT ECONOMY

ORDER DATE: 5/26/2017

CUST PO: PO36464

MONROE TAX ID: 47-3784072

FOB: MELBOURNE, FL

OF BOXES:

SHIPMENT #: 0

SHIP DATE: 5/26/2017

	ORDER #: 533902	=0400440422	· V	NIE MONEO	E ACCOUNT REP:	Luis Sepulveda
CUST	OMER #: 16754	AWB: 731281121329	/	JOK WONTO	Z AGGGGRATINET	
						1
ITEM	PART NUMBER/DESCRIPTION	SHI	PPED BIO	CD	UNIT PRICE	UOM
1	MS21075L3N NUTPLATE		500.00 0.00	NE		EA
	ECCN#: 9A991.d SCHB#: 7318.16.0000					
/	MFR: AFC	LOT: 2	22126			
$\sqrt{2}$	AN4-12 BOLT DRILLED		50.00 0.00	NE		EA
	⊭CCN#: 9A991 SCHB#: 7318.15.2000		/	$\Delta \perp$		
l /	MFR: AFC	LOT: j	2855			·
V4	AN970-6 WASHER		20.00 80.00	NE		EA
	ECCN#: 9A991 SCHB#: 7318.22.0000			1		
	MFR: SUPERIOR	LOT: !	540305-3			
<u> </u>	MS21044N3 LOCKNUT		100.00 0.00	NE		EA
	/ECCN#: 9A991 SCHB#: 7318.16.0030		1)			
/		LOT	723799-00	.l		
√ 6	MFR: ABBOTT MS21059L3 NUTPLATE	T	30.00 0.00	NE		EA
	ECCN#: 9A991 SCHB#: 7318.16.0030					
/	MFR: AFC	LOT: :	23839	<u></u>		
$\left \int_{7} \right $	MS35207-268 PAN HEAD SCREW		100.001 0.00	NE		EA
	ECCN#: 9A991 SCHB#: 7318.15.4000					
	MFR: GENIE	LOT:	13-313			
	WITC SERVE					
CDEC	AL INSTRUCTIONS:			~ ~	T	
SPECIA	AL HASTRUCTIONS.	\leq \sim	1115	29.		
		**	11-1			
ŀ						
	We Thank You Fo	r Your Continued	Business!			



PACKING SLIP

INVOICE #: 601781 **DATE PRINTED:** 5/26/2017

TIME: 3:02:47 PM

OF ITEMS: 6 PAGE: 2

TO: DART AEROSPACE LTD. ACCTS. PAYABLE 1270 ABERDEEN STREET HAWKESBURY, ON K6A 1K7 CANADA

ATTN: CHANTAL LAVOIE

Ph: 613.632.3336 Fax: 613.632.5246

SHIP TO: DART AEROSPACE LTD. ATTN: RECEIVING 1270 ABERDEEN STREET HAWKESBURY, ON K6A 1K7

CANADA

INVOICE DATE: 5/26/2017

TERMS: NET 30

WEIGHT: 5.55

SHIP VIA: 113- FX INT ECONOMY

ORDER DATE: 5/26/2017

CUST PO: PO36464

OF BOXES:

FOB: MELBOURNE, FL

SHIPMENT #: 0

SHIP DATE: 5/26/2017 **SALES ORDER #**: 533902

CUSTOMER #: 16754

AWB: 731281121329

YOUR MONROE ACCOUNT REP: Luis Sepulveda

ITEM	PART NUMBER/DESCRIPTION	SHIPPED	В/О	CD	UNIT PRICE	uom	_
					4. * * *		
		* * !	* Order Not	Comple	ete * ^ ^		
	•						
						α	
					OJE	1/8/	
					0 %		
				!			
					•		
							ı
SPECI	AL INSTRUCTIONS:						
			1				
	We Thank You For Your Contin		2SS!				
	MONROE TAX ID: 47-3784	072 				<u> </u>	
						·	



MONROE TAX ID: 47-3784072

Invoice

INVOICE #: 601781 **DATE PRINTED: 5/26/2017**

TIME: 3:02:52 PM

OF ITEMS: 6 PAGE: 1

TO: DART AEROSPACE LTD. ACCTS. PAYABLE 1270 ABERDEEN STREET HAWKESBURY, ON K6A 1K7

CANADA

SHIP TO: DART AEROSPACE LTD. ATTN: RECEIVING

1270 ABERDEEN STREET HAWKESBURY, ON K6A 1K7

CANADA

ATTN: CHANTAL LAVOIE

Ph: 613.632.3336 Fax: 613.632.5246

TERMS: NET 30

WEIGHT: 5.55

SHIP VIA: 113- FX INT ECONOMY

INVOICE DATE: 5/26/2017 ORDER DATE: 5/26/2017

CUST PO: PO36464

OF BOXES:

SHIPMENT #: 0

SHIP DATE: 5/26/2017

SALES ORDER #: 533902 **CUSTOMER #: 16754**

AWB: 731281121329

FOB: MELBOURNE, FL

YOUR MONROE ACCOUNT REP: Luis Sepulveda

)					
ITEM	PART NUMBER/DESCRIPTION		SHIPPED	B/O	CD	UNIT PRICE	UOM	TOTAL AMT
1	MS21075L3N NUTPLATE		500.00	0.00	NE	0.4000	EA	\$200.000
	ECCN#: 9A991.d SCHB#: 7318.16.0000			<u></u>				
	MFR: AFC	LOT:22126						\$23.000
2	AN4-12 BOLT DRILLED		50.00	0.00	NE	0.4600	EA	\$23.000
,	ECCN#: 9A991 SCHB#: 7318.15.2000		/_					
:/	MFR: AFC	LOT:22855		<u> </u>	<u> </u>	I 0.4200	EA	\$2.600
4	AN970-6 WASHER		20.00	80.00	NE	0.1300	[Ψ2.000
	ECCN#: 9A991 SCHB#: 7318.22.0000						<u> </u>	
	MFR: SUPERIOR	LOT:540305						\$10.000
5	MS21044N3 LOCKNUT		100.00	0.00	NE	0.1000	EA	\$10.000
	ECĆN#: 9A991 \$CHB#: 7318.16.0030)]				<u></u>	j
,	MFR: ABBOTT	LOT:723799					J _,	\$15.000
6	MS21059L3 NUTPLATE		30.00	0.00	NE	0.5000	EA	7 \$15.000
/	ECCN#: 9A991 SCHB#: 7318.16.0030						<u> </u>	,
	MFR: AFC	LOT:23839						\$10,000
7	MS35207-268 PAN HEAD SCREW		V100.00	0.00	NE	0.1000	EA	<i>₩</i> 10.000
	ECCN#: 9A991 SCHB#: 7318.15.4000						<u> </u>	
	MFR: GENIE	LOT:13-313						
SPECI	AL INSTRUCTIONS:							
			1.5	,				
	We Thank You For	Your Conti	nued Busines	ss!				
				<u> </u>				



MONROE TAX ID: 47-3784072

Invoice

INVOICE #: 601781

DATE PRINTED: 5/26/2017

TIME: 3:02:56 PM

OF ITEMS: 6 PAGE: 2

TO: DART AEROSPACE LTD.
ACCTS. PAYABLE

1270 ABERDEEN STREET HAWKESBURY, ON K6A 1K7

CANADA

ATTN: CHANTAL LAVOIE

Ph: 613.632.3336 Fax: 613.632.5246

SHIP TO: DART AEROSPACE LTD.

ATTN: RECEIVING

1270 ABERDEEN STREET HAWKESBURY, ON K6A 1K7

CANADA

INVOICE DATE: 5/26/2017

TERMS: NET 30

WEIGHT: 5.55

SHIP VIA: 113- FX INT ECONOMY

ORDER DATE: 5/26/2017

CUST PO: PO36464

OF BOXES: SHIPMENT #: 0 51.II. 1.II.

SHIP DATE: 5/26/2017 **SALES ORDER** #: 533902

CUSTOMER #: 16754

AWB: 731281121329

FOB: MELBOURNE, FL

YOUR MONROE ACCOUNT REP: Luis Sepulveda

M	PART NUMBER/DESCRIPTION	SHIPPED	B/O	CD	UNIT PRICE	UOM	TOTAL AMT
		***	Order No	ot Comple	te * * *	1	
						:	
				.			·
				<u> </u>			
ECI	AL INSTRUCTIONS:				SUB TOTAL	.:	\$260.60
					TAX TOTAL	.:	\$0.00
					MISC CHARGE	<u> </u>	\$0.00
	We Thank You For You	r Continued Busines	ss!		FREIGHT	:	\$0.00
	vve Illalik 100 101 100.	Communica Basines			TOTAL	:	\$260.6
							US



CERTIFICATE OF CONFORMITY

NO: 601781

BILL TO:

DART AEROSPACE LTD.
ACCTS. PAYABLE
1270 ABERDEEN STREET
HAWKESBURY, ON K6A 1K7

SHIP TO:

DART AEROSPACE LTD.
ATTN: RECEIVING
1270 ABERDEEN STREET
HAWKESBURY, ON K6A 1K7

CUSTOMER PO	SHIP DATE	AIRWAY BILL/TRACKING #
PO36464	5/26/2017	731281121329

PART NO:	Description	CND	QTY	S/L		
MS21075L3N	NUTPLATE	NE	500	80	LOT: 22126	MFR: AFC
AN4-12	Customer Reference: BOLT DRILLED	NE	50	22	LOT: 22855	MFR: AFC
AN970-6	Customer Reference: WASHER	NE	20	29	LOT: 540305-3	MFR: SUPERIOR
MS21044N3	Customer Reference:	NE	100	91	LOT: 723799-00	MFR: ABBOTT
MS21059L3	Customer Reference: NUTPLATE	NE	30	123	LOT: 23839	MFR: AFC
MS35207-268	Customer Reference: PAN HEAD SCREW	NE	100	29	LOT: 13-313	MFR: GENIE
	Customer Reference:	ŀ		•		
				<u> </u>		
•	·					
			<u> </u>	<u> </u>		

CONDITIONS:

NE - New

OH-OVERHAULED

RP-REPAIRED

SV-SERVICEABLE

We hereby certify that the items that are a part of this Purchase Order have been visually & dimensionally found to conform to all applicable standards, drawings & specifications. The liability of ECAS, LLC is limited to replacement of any item which is rejected because of a defect in material or workmanship if notified within 30 days & liability shall not exceed the invoice value. Such replacement shall constitute satisfaction of all liability.

SIGNED:

(4.4.24

For and on behalf of ECAS, LLC dba MONROE AEROSPACE



2655 HARRISON AVE. SW CANTON, OH 44706 PHONE: (330)430-6190 FAX: (330)430-6199

CERTIFICATE OF CONFORMANCE

EAST COAST AVIATION

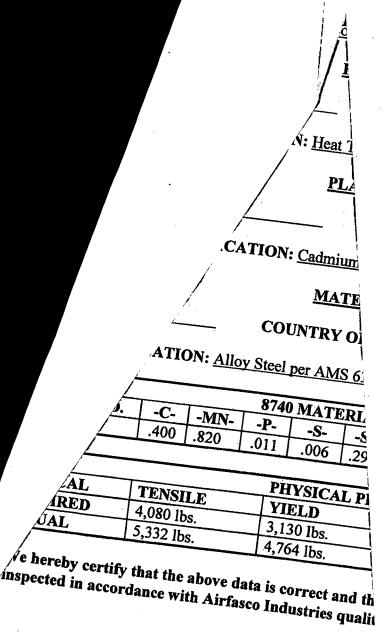
I Hereby Certify that on 03/22/12 Airfasco Industries provided the supplies called for by Contract/PO Number 59403 in accordance with all applicable requirements for shipment. I further state that the process certifications are in conformance with the contract requirements, including specifications and/or drawings, physical item identification (part number) and the quantity shown on this or attached acceptance document. The part numbers certified below have been manufactured in the United States. DFAR 252.225-7014 ALT 1 compliant in fastener base raw material melt source only, with heat number and country, does not include the post cadmium metal plating.

Quality Assurance Representative

PART NUMBER	LOT NU	JMBER	QUANTITY	PART NUMBER	LOT NUMBER	QUANTITY
MS21075L3N	22126		43500			



2655 HARRISON AVE. SW CANTON, OH 44706 PHONE: (330)430-6190 FAX: (330)430-6199



Airfasco Industries Quality Assurance Represent

AIRFASCO INDUSTRIES QUALITY CON

F4-0

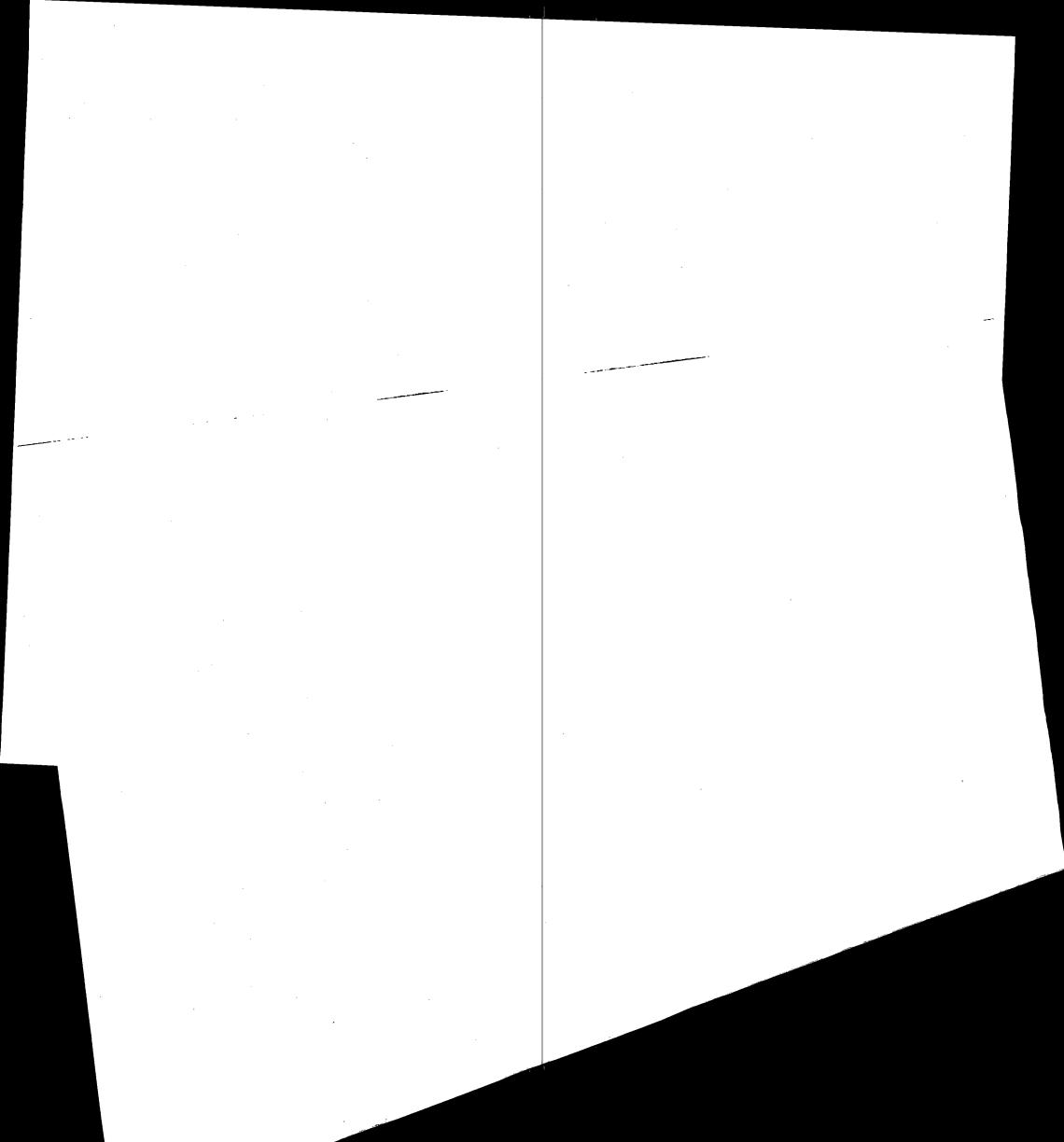
CERTIFICATE OF CONFORMANCE

EAST COAST AVIATION

I Hereby Certify that on 4/5/13 Airfasco Industries provided the supplies called for by Contract/PO Number 65700 in accordance with all applicable requirements for shipment. I further state that the process certifications are in conformance with the contract requirements, including specifications and/or drawings, physical item identification (part number) and the quantity shown on this or attached acceptance document. The part numbers certified below have been manufactured in the United States. DFAR 252.225-7014 ALT 1 compliant in fastener base raw material melt source only, with heat number and country, does not include the post cadmium metal plating.

Quality Assurance Representative

		OUANTITY	PART NUMBER	LOT NUMBER	QUANTITY
PART NUMBER	LOT NUMBER		TARTROME		
AN4-12	22855	2025			
		·		·	



SUPERIOR WASHER AND GASKET CORP.

170 Adams Avenue
Hauppauge, New York 11788
Phone: (631) 273-8282
Fax: (631) 273-8088
E-Mail: swg@superiorwasher.com
Web: superiorwasher.com
(In the East)

SUPERIOR WASHER AND GASKET CORP.

662 Bryant Blvd.
Rock Hill, South Carolina 29732
Phone: (803) 366-3250
Fax: (803) 366-3511
E-Mail: swg@superiorwasher.com
Web: superiorwasher.com
(In the South)

chanical Dranatics

EAST COAST AVIATION SUPPLIES 399 EAST DRIVE

MELBOURNE

, FL 32904

Customer Purchase Order Number	Superior Order Number	Superior Lot Number	Tracer No.
71158	C139270-6	540305 - 3	NY31586 -3
Date Production Card	Part Number		Quantity
05-16-14 0	AN970-6		3,000
Drawing	Dual Cert No.		
NASM970 REV 1			

We hereby certify that all materials and processes conform to the required drawing specifications and that the parts have been manufactured in the U.S.A.

All parts are manufactured in a Mercury-free environment

Material

1008 LOW CARBON STEEL per AIR4127

CAD YELLOW AMS-QQ-P-416 TY2 CL2 .0003/.0006

	Chemical Anal	<u>ysis</u>	<u>Mechanical Properties</u>	
С	CARBON	.0700	Yield	
Mn	MANGANESE	.3500	Tensile	
P	PHOSPHORUS	.0060	Elongation	
S	SULPHUR		Hardness	B 46.0
Si	SILICON	.0100	Heat	4128777
Cr	CHROMIUM		Magnetic	
Ni	NICKEL		Permeability	
Mo	MOLYBDENUM		•	
Cu	COPPER		Bend Test	
Fe	IRON			
Ti	TITANIUM		·	
Co	COBALT			
N	NITROGEN			
Cb	COLUMBIUM			
A1	ALUMINUM	.0490	SUPERIOR WASHER & GASK	ET CORP
Sn	TIN		BOI ERIOR WASINER & GASI	Di com.
Mg	MAGNESIUM			
Zn	ZINC		By Buchard anders	en D
Pb	LEAD			
Va	VANADIUM		Richard Anderson, Jr.	
			Quality Control Manager	

190 Abbott Oriva Wheeling Kinois 60090 at Tat 847,459,6200 at Fax 847,459,4076 Toll Free 800,877,0789 at Ernell sales@abbott-interfast.com at www.ebbott/interfast.com

CERTIFICATE OF CONFORMANCE

DATE 3/10/16
CUSTOMER NAME EAST COAST AVIATION SUPPLIES INC
P.O. # FL76103 P.O. DATE 3/1/16
AIC PART # SN-102NM44 MS # MS21044N3/NASM 21044 REV1
PART NAME 10-32 NM STEEL LOCKNUT CAD YELLOW SHIPPER # 75334
THREAD SPEC MIL-S-8879C / .1900-32 UNJF-3B
PROCUREMENT SPEC NUMBER # MIL-N-25027G & NASM25027 REV NEW
DATE SHIPPED 3/8/18 QTY SHIPPED 251,000
AIC PRODUCTION LOT # 20150512-723799-00-PPO
STELOC PRODUCTION P.O. # 724321 MAT'L HEAT # 3VG57
MAT'L TYPE 1010
NON-METALLIC INSERT CONFORMS TO ASTM D 4066, GROUP 1, CLASS 1 OR 2
SURFACE FINISH / FINISH SPEC N/A / N/A
LAB REPORT SEE ATTACHED ELEMENT W/O # ABB014-02-08-45791-1 REV 1 (MAGNETIC PARTICLE INSPECTION; MATERIAL COMPOSITION; TENSILE)
FLUORESCENT PENETRANT N/A MAGNETIC PERMEABILITY N/A
LOCKING TORQUE SPECIFICATION = NASM25027, REV NEW SAMPLE SIZE = 27
REQUIREMENTS:
1 st , 7 th , 15 th , INSTALLATION MAXIMUM TORQUE (IN LBS.) 18 TESTED RESULTS (RANGE) 2.5-5.0
1 st , 7 th , 15 th , BREAKAWAY MINIMUM TORQUE (IN LBS.) <u>2.0</u> TESTED RESULTS (RANGE) <u>3.0-5.5</u>
We certify that the finished parts and/or materials used conform in all respects to the applicable drawings, specifications, and/or standards. Complete reports of all applicable testing are retained on file for on-site examination. Quality level, sampling plans, and testing conforms to the required specifications. The products are Mercury Free. Reproduction of this Certificate without permission is prohibited.
Very truly yours,
Vera takivak
Vera lakivlak Quality Manager
NASMCOC REV 032615



Element Materials Technology 2 Pheasant Run Nevrtown, PA 18940-1819 USA

P 215 579 7500 F 215 579 7591 T 883 786 7555 info.newtown@element.com

element.com

Contact: Mike Tiritilli Abbott - Interfast Corporation

190 Abbott Dr

WHEELING, IL 60090

TEST CERTIFICATE -- EAR-CONTROLLED DATA

Date:

2/10/2016

P.O. No.;

344937

W/O No.:

ABB014-02-08-45791-1 Rev. 1

Corrected Certification 2/11/16

AIC PART NUMBER	SN-102NM40	
MS NUMBER	MS21044N3	
MATERIAL HEAT NUMBER	3VG57	-
MATERIAL	1010	
STELOC PRODUCTION PO*	724321*	
DESCRIPTION	10-32NM Steel Nylon Insert Locknut	
SPECIFICATION	NASM 25027 Sept. 99 Rev. New / NASM 21044 Rev. 1	

Magnetic Particle Inspection Results						
Type:	Wet Fluorescent					
Equipment No.:	Magnaflux Model AD-945 MMA#401/464/482					
MT Technique No.:	ABB014-SN-102NM-40					
Testing Specification:	ASTM-E1444 / E1444M-12					
Acceptance Criteria:	NASM 25027 Sept. 99 Rev. New					
Inspected per Procedure:	42.00 Rev. 15					
Alloy:	Steel					
Surface Condition:	Machined					
Method:	Continuous Method					
Shot ID: A-A, Circular (Head Shot) Amperage:	170					
Shot ID: B, Longitudinal (Coll Shot) Amperage:	1,390					
Demagnetized:	< 2 Gauss					
Area of Inspection:	100% of all accessible surfaces					
Quantity Inspected:	27					
Quantity Accepted:	27					
Quantity Rejected:	0					
Quantity Referred to Micro:	0					
ndications Observed:	None					
Pate of Inspection:	2/9/16					

We hereby certify the above listed parts are processed in accordance with applicable specifications. Test reports on file.

ESALAMIA 22 Notested

Don Freeze

NAS 410/SNT-TC-1A Level 2, MT due 1-2017

Peggy Wolfe

Quality Administrator

Information and statements in this report are derived from material, information and/or specifications furnished by the client and exclude any expressed or implied warranties as to the fitness of the material tested or analyzed for any particular purpose or use. The testing reported on this certification has been performed in accordance with QAM 4th Edition Rev. 5 Dated 6/10/2015 and related procedures. All testing has been performed in accordance with the latest revision of the applicable published test method in effect at the time of testing, unless otherwise stated. This report shall not be reproduced except in full, without written approval of this laboratory. The recording of false, fictitious, or fraudulent statements or entries on this document may be punished as a felony under Federal Statutes including Federal Law Title 18, Chapter 47. Sample remnants are held for a minimum of 30 days following issuance of test results, at which point they will be discarded unless notified in writing by the client.

ALL TESTING PERFORMED IN A MERCURY-FREE ENVIRONMENT

Page 1 of 3



Element Materials Technology 2 Pheasant Run Newtown, PA 18940-1819 USA

P 215 579 7500 F 215 579 7591 T 888 786 7555 Info.nevtown@element.com element.com

Contact; Mike Tritilli
Abbott - Interfast Corporation
190 Abbott Dr
WHEELING, IL 60090

TEST CERTIFICATE -- EAR-CONTROLLED DATA

Date:

2/10/2016

P.O. No.: W/O No.: 344937

ABB014-02-08-45791-1 Rev. 1

1010

		1010		
Element	•	Result %	Min %	Max %
C ·	=	0.12	0.08	0.13
Mn	=	0.50	0.30	0.60
P	=	0.012	0.000	0.030
s	æ	0.011	0.000	0.050
Si	=	0.06	0.00	NS
Cr	_=	0.01	0.00	NS
. NI	=	0.01	0.00_	NS
Mo	<	0.01	0.00	NS
Cu	<	0.01	0.00	NS
Fe	= ·	Balance Bala		Balance

Chemical testing was performed on an Optical Emission Spectrometer in accordance with ASTM-E415

Respectfully submitted

Peggy Wolfe

Quality Administrator

Information and statements in this report are derived from material, Information and/or specifications furnished by the client and exclude any expressed or implied warranties as to the fitness of the material tested or analyzed for any particular purpose or use. The testing reported on this certification has been performed in accordance with QAM 4th Edition Rev. 5 Dated 6/10/2015 and related procedures. All testing has been performed in accordance with the latest revision of the applicable published est method in effect at the time of testing, unless otherwise stated. This report shall not be reproduced except in full, without written approval of this laboratory. The recording of false, fictitious, or fraudulent statements or entries on this document may be punished as a felony under Federal Statutes Including Federal Law Title 18, Chapter 47. Sample remnants are held for a minimum of 30 days following Issuance of test results, at which point they will be discarded unless notified in writing by the client.

ALL TESTING PERFORMED IN A MERCURY-FREE ENVIRONMENT

Page 2 of 3



Element Materials Technology 2 Pheasant Run Newtown, PA 18940-1819 USA P 215 579 7500 F 215 579 7591 T 888 786 7555 info.newtown@element.com element.com

Contact: Mike Tiritill Abbott - Interfast Corporation 190 Abbott Dr WHEELING, IL 60090

TEST CERTIFICATE -- EAR-CONTROLLED DATA

Date: P.O. No.: 2/10/2016

W/O No.:

344937

ABB014-02-08-45791-1 Rev. 1

Nut Axial Tensile
Test Method | NASM 1312-8

	Ultimate	
	Load	Fracture
Specimen	(lbf)	Location
Min. Requirements	2,460	
1	2,471	Discontinued after reaching min requirement
2	2,471	Discontinued after reaching min requirement
3	2,470	Discontinued after reaching min requirement
4	2,471	Discontinued after reaching min requirement
5	2,470	Discontinued after reaching min requirement
6	2,471	Discontinued after reaching min requirement
7	2,471	Discontinued after reaching min requirement
8	2,472	Discontinued after reaching min requirement
9	2,472	Discontinued after reaching min requirement
10 "	2,470	Discontinued after reaching min requirement
11	2,471 -	Discontinued after reaching min requirement
12	2,472	Discontinued after reaching min requirement
13	2,472	Discontinued after reaching mln requirement
14	2,471	Discontinued after reaching min requirement
15	2,470	Discontinued after reaching min requirement

Forty-two tests listed on this certification have been performed in accordance with NASM 25027 Sept. 99 Rev. New / NASM 21044 Rev. 1 and all tested samples do conform to the specification requirements.

This document contains technical data whose export and re-export retransfer is subject to control by the U.S. Department of Commerce under the Export Administration Act and the Export Administration Regulations. The Department of Commerce's prior written approval may be required for the export or re-export/retransfer of such technical data to any foreign person, foreign entity or foreign organization whether in the United States or abroad.

Respectfully submitted

Peggy Wolfe

Quality Administrator

Information and statements in this report are derived from material, information and/or specifications furnished by the client and exclude any expressed or implied warranties as to the fitness of the material tested or analyzed for any particular purpose or use. The testing reported on this certification has been performed in accordance with QAM 4th Edition Rev. 5 Dated 6/10/2015 and related procedures. All testing has been performed in accordance with the latest revision of the applicable published test method in effect at the time of testing, unless otherwise stated. This report shall not be reproduced except in full, without written approval of this laboratory. The recording of false, fictitious, or fraudulent statements or entries on this document may be punished as a felony under Federal Statutes including Federal Law Title 18, Chapter 47. Sample remnants are held for a minimum of 30 days following issuance of test results, at which point they will be discarded unless notified in writing by the client.

ALL TESTING PERFORMED IN A MERCURY-FREE ENVIRONMENT

Page 3 of 3



2655 Harrison Ave. SW Canton, Ohio 44706-3047

Phone: 330-430-6190 Fax: 330-430-6199

CERTIFICATE OF CONFORMANCE

EAST COAST AVIATION

I Hereby Certify that on 11/06/14 Airfasco Industries provided the supplies called for by Contract/ PO Number 73128 in accordance with all applicable requirements for shipment. I further state that the process certifications are in conformance with the contract requirements, including specifications and/or drawings, physical item identification (part number) and the quantity shown on this or attached acceptance document. The part numbers certified below have been manufactured in the United States. DFAR 252.225-7009 compliant in fastener base raw material melt source only, with heat number and country, does not include the post cadmium metal plating.

Quality Assurance Representative

WM. DENT

PART NUMBER	LOT NUMBER	QUANTITY	PART NUMBER	LOT NUMBER	QUANTITY
MS21059L3	23839	49100			
		·			





PHYSICAL AND CHEMICAL CERTIFICATION

AFC LOT NO.: 23839

DATE MFG.: 3/18/2014

SAMPLE SIZE: 10

QTY MFG.: 49,800

PART NO.: AFC59F1032L

PROCUREMENT SPECIFICATION: NASM25027 Dec 2012

CONFORMS TO: MS21059L3 per NASM1059 rev. 2, NAS686A3 rev. 13

HEAT TREAT PROCUREMENT SPECIFICATION:

AMS 2759

VENDOR: Brite Metal

VENDOR: Beringer Plating

CERT NO.: 165357

HARDNESS: HRC 33.00 35.00

PLATING PROCUREMENT SPECIFICATION:

Cadmium Plate per AMS-QQ-P-416C, type 2, class 2

CERT NO.: 78801

PROCESS: 0003" Bake 24 hrs 375 F

LUBE PROCUREMENT SPECIFICATION:

VENDOR: Everlube

SAE AS5272E type 1, bake 1 hour 375 F

CERT NO.: PC-14506

RESULTS: .0003" 96 hr salt spray

HEAT: NLPR0072D		MILL:	Consolidated	Metal	COUNT	RY OF	MELT:	USA			
ELEMENT-ID	-C-	-MN-	-P-	-S-	-\$1-	-NI-	-CR-	-MO-	-CU-	-Al-	Other
LADLE	0.520	0.640	0.008	0.002	0.210	0.060	0.050	0.020	0.150	0.029	•
RETAINER MATERIAL:	UNS G1	0500, per A	STM A682, C1	050, .025	" × 4.060	ם""					
HEAT: 280353		MILL:	Steel Tech		COUNT	RY OF	MELT:	USA			
ELEMENT-ID	-C-	-MN-	-P-	-S-	-SI-	-NI-	-CR-	-MO-	-CU-	-Al-	Other
LADLE	0.520	0.730	0.015	0.004	0.249	0.055	0.163	0.017	0.118	0.035	-

PHYSICAL PROPERTIES	AXIAL TENSILE	TORQUE IN MIN.	TORQUE OUT MAX.	TORQUE REMOVAL	TORQUE OUT RETAINER	PUSH OUT	HARDNESS HRC 33-35
REQUIRED	2,460 lbs.	2.0 in-lbs.	18.0 in-lbs.	18.0 in-lbs.	60.0 in-lbs.	150.0 lbs.	33-35
ACTUAL LOW	3,257 lbs.	8.6 in-lbs.	8.0 in-lbs.	7.6 in-lbs.	118.0 in-lbs.	262.0 lbs.	34.00
ACTUAL AVG.	3,345 lbs.	10.2 in-lbs.	9.5 in-lbs.	8.9 in-lbs.	129.2 in-lbs.	284.0 lbs.	34.00
ACTUAL HIGH	3,412 lbs.	12.2 in-lbs.	11.4 in-lbs.	10.8 in-lbs.	142.0 in-lbs.	306.0 lbs.	35.00

72 hour stress embrittlement test 75% - 80% tensile calculated 60 in-lbs., 1,968 lbs in accordance with MIL-STD-1312/14 Non-Destructive Magnetic Particle per ASTM-E-1444-05 sample lot size:

UNS G10500 is not a specialty grade steel per DFAR 252.225-7014.

DFAR complaint 252.225-7014 Domestic Specialty Metals Alternate 1.

Vision Inspected Lat - INSPEC100. Metallurgical Examination satisfactory.

Made in the USA.

CONTROLLED

We hereby certify that the above data is correct and that the fasteners have been manufactured and inspected in accordance with Airfasco Industries quality requirements.

Airfasco Industries

Quality Assurance Representative;

AIRFASCO INDUSTRIES QUALITY CONTROL FORM 10/1N





PHYSICAL TORQUE TEST CERTIFICATION

AFC LOT NO .:

23839

DATE MFG.: 3/18/2014

SAMPLE SIZE:

10

QTY MFG.:

49,800

PART NO.:

AFC59F1032L

PROCUREMENT SPECIFICATION: NASM25027 Dec 2012

CONFORMS TO: MS21059L3 per NASM1059 rev. 2, NAS686A3 rev. 13

TORQUE TEST: Min. 2.0 in-lbs. max. 18.0 in-lbs. Installations are torque in values. Torques out values is the breakaway and removal unseated in the opposite assembly direction. First, seventh and fifteenth cycles with NAS9703-20 test botts.

TORQUE	TORQUE	TORQUE	TORQUE	TORQUE	TORQUE	TORQUE	TORQUE	TORQUE	TORQUE	ACCEPT
SAMPLE	1st in	1st out	1st rem.	7th in	7th out	7th rem.	15th in	15th out	15th rem.	REJECT
1	10.2	9.6	9.0	9.8	8.6	8.2	9.2	8.8	8.0	passed
2	8.2	8.4	8.0	8.6	B.O	7.6	8.9	8.4	8.0	passed
3	10.4	10.0	10.2	10.0	9.4	9.0	9.8	9.2	9.6	passed
4	12.2	11.4	10.6	11.2	10.2	10.0	10.2	9.4	8.6	passed
5	12.0	11.0	10.8	11.3	10.1	9.7	9.7	9.6	9.2	passed
6	12.2	11.4	10.6	11.2	10.2	10.0	10.2	8.4	8.6	passed
7	10.3	9.7	8.8	10.0	9.4	9.0	9.3	8.9	8.1	passed
8	9.2	8.4	8.0	8.6	8.0	7.6	8.9	8.4	8.0	passed
9	11.7	11.3	9.8	10.3	9.5	8.9	9.6	8.8	7.8	passed
10	10.5	10.0	9.2	10.4	9.6	8.8	9.5	8.6	8.2	passed
11	#REF!	#REF	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REFI_	#REF!
12	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
13	#REF	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
14	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
15	#REF!	#REF!	#REF!	#REFI	#REF!	#REF!	#REF!	#REF!	#REF	#REF!
low	9.2	8.4	8.0	8.6	8.0	7.6	8.9	8.4	7.8	passed
avg.	10.8	10.1	9.5	10.1	9.3	8.9	9.5	9.0	8.4	passed
high	12.2	11.4	10.8	11.3	10.2	10.0	10.2	9.6	9.6	passed

CONTROLLED

We hereby certify that the above data is correct and conforms to the torque test requirements and that the fasteners have been manufactured and inspected in accordance with Airfasco Industries quality requirements.

Airfasco Industries

Quality Assurance Representative:

PAGE 2 OF 7





PHYSICAL TORQUE OUT & EMBRITTLEMENT TEST CERTIFICATION

AFC LOT NO .: 23839

DATE MFG.: 3/18/2014

SAMPLE SIZE: 10

QTY MFG.: 49,800

PART NO.: AFC59F1032L

PROCUREMENT SPECIFICATION: NASM25027 Dec 2012

CONFORMS TO:

MS21059L3 per NASM1059 rev. 2, NAS686A3 rev. 13

TORQUE OUT & EMBRITTLEMENT TEST: Minimum of 60 in-lbs. proof load applied in accordance with NASM25027 and NASM21059 with NAS9703 test bolts. An inspection for deformation of the nut and retainer was performed. The required torque load of 75-80% of tensile 1.968 lbs was maintained for hydrogen embrittlement inspection for cracks or nut deformation. After 72 hours minimum an examination under 10X magnification for cracks or deformation was performed and does meet all specification requirements. Torque then increased to failure and method of failure noted.

NUT SAMPLÉ	TORQUE OUT 72 in-lbs. min.	TORQUE OUT	DATE and TIME TORQUED UP	DATE and TIME INSPECTED	ACCEPT REJECT	METHOD OF FAILURE
1	60.0	124.0	12/2/13 9:00 AM	12/5/13 9:00 AM	41613.4	strio deformations
2	60,0	132.0	3/11/14 9:00 AM	3/14/14 9:00 AM	passed	strip deformations
3	60.0	118.0	3/11/14 9:00 AM	3/14/14 9:00 AM	passed	strip deformations
4	60.0	124.0	3/11/14 9:00 AM	3/14/14 8:00 AM	passed	strip deformations
5	80.0	136.0	3/11/14 8:00 AM	3/14/14 B:00 AM	passed	strip deformations
6	60,0	138.0	3/11/14 9:00 AM	3/14/14 9:00 AM	passed	strip deformations
7	60,0	142,0	3/11/14 9:00 AM	3/14/14 9:00 AM	passed	Strip deformations
8	60,0	119.0	3/11/14 9:00 AM	3/14/14 9:00 AM	passed	strip deformations
9	60,D	129.0	3/11/14 B:00 AM	3/14/14 9:00 AM	passed	atrip deformations
10	60.0	126.0	3/11/14 9:00 AM	3/14/14 9:00 AM	passed	strip deformations
11	#REF!	#REFI	#REF!	#REFI	#REFI	#REF!
12	#REFI	#REFI	#REF!	#REF!	#REF!	#REF!
13	#REFI	#REF!	#REFI	#REF!	#REF!	#REFI
14	#REF!	#REF!	#REF!	#REFI	#REF!	#REF!
15	#REF!	#REF	#REF!	#REF!	#REFI_	#REFI
low		118.0				
avg.		129.2				
high	1	142.0				

CONTROLLED

We hereby certify that the above data is correct and conforms to the test requirements and that the fasteners have been manufactured and inspected in accordance with Airfasco industries quality requirements,

PAGE 3 OF 7

Airlasco Industries

Quality Assurance Representative:

AIRFASCO INDUSTRIES QUALITY CONTROL FORM 1011N WT





PHYSICAL PUSH OUT ASSEMBLY TEST CERTIFICATION

AFC LOT NO .:

23839

DATE MFG.: 3/18/2014

SAMPLE SIZE: 10

QTY MFG.:

49,800

PART NO.: AFC69F1032L

PROCUREMENT SPECIFICATION: NASM25027 Dec 2012

CONFORMS TO: MS21059L3 per NASM1059 rev. 2, NAS686A3 rev. 13

PUSH OUT ASSEMBLY TEST: 100 lbs. min. (proof load) inspection for push out nut from the retainer assembly applied with NAS9703-20 test bolts. After minimum proof load an examination under 10X magnification for deformation was performed and does meet specification requirements. Force then increased to 150% of minimum requirement then increased force applied to failure and method of failure noted.

NUT	PUSH OUT	PUSH OUT	PUSH OUT	ACCEPT REJECT	METHOD OF FAILURE
SAMPLE	100 lbs. min.	150 lbs. (P/L)	TO FAILURE	ACCEPT REJECT	WETHOU OF FAILURE
1	100.0	150.0	295,0	passed	retainer deformation
2	100.0	150.0	274.0	passed	retainer deformation
3	100.0	150.0	_305.0	passed	retainer deformation
4	100.0	150,0	278.0	passed	retainer deformation
5	100,0	150.0	<u>2</u> 62.0	passed	retainer deformation
6	100.0	150,0	268.0	passed	retainer deformation
7	100.0	150.0	292.0	passed	retainer deformation
8	100.0	150,0	285.0	passed	retainer deformation
9	100.0	150.0	302.0	passed	retainer deformation
10	100,0	150,0	278.0	passed	retainer deformation
#REFI	#REF!	#REF!	#REF!	#REF!	#REF!
#REFI	#REF!	#REF!	#REF!	#REF!	#REF!
#REF1	#REF!	#REF!	#REF!	#REF!	#REFI
#REF!	#REF	#REF!	#REF	#REF	#REFI
#REFI	#REF!	#REF!	#REF! .	#REF!	#REF!
low			262.0		
avg.			284.0		
high			306.0		

We hereby certify that the above data is correct and conforms to the torque test requirements and that the fasteners have been manufactured and inspected in accordance with Airfasco industries quality requirements.

Airfasco Industries

Quality Assurance Representative:





PHYSICAL AXIAL TENSILE TEST CERTIFICATION

AFC LOT NO .:

23839

DATE MFG.: 3/18/2014

SAMPLE SIZE: 10

QTY MFG.: 49,800

PART NO.:

AFC59F1032L

PROCUREMENT SPECIFICATION: NASM25027 Dec 2012

CONFORMS TO: MS21059L3 per NASM1059 rev. 2, NAS686A3 rev. 13

AXIAL TENSILE TEST: Method NASM1312-8 (Formally MiL-STO-1312/8) 2,460 min. lbs. proof load inspection for nut deformation. Maximum load Increased to failure before deformation, stripped threads or NAS9703-20 test bolt failure.

TENSILE	PROOF LOAD	TENSILE TO	METHOD OF	ACCEPT
SAMPLE	2,460 LBS.	FAILURE LBS.	FAILURE	REJECT
1	2,460	3,356	strip deformation	passed
2	2,460	3,362	strip deformation	passed
3	2,460	3,392	strip deformation	passed
4	2,460	3,356	strip deformation	passed
<u>5</u>	2,460	3,257	strip deformation	passed
6	2,460	3,345	strip deformation	passed
7	2,460	3,286	strip deformation	passed
8	2,460	3,356	strip deformation	passed
9	2,460	3,412	strip deformation	passed
10	2,460	3,327	strip deformation	passed
11	#REF!	#REF!	#REF!	#REF!
12	#REF1	#REF!	#REF	#REF!
13	#REF!	#REF!	#REF!	#REF!
14	#REF!	#REF!	#REF!	#REF!
15	#REF!	#REF!	#REF!	#REF!
low		3,257		
avg.		3,345		
high		3,412		

CONTROLLED

We hereby certify that the above data is correct and conforms to the axial tensile test requirements and that the fasteners have been manufactured and inspected in accordance with Airfasco Industries quality requirements,

Airfasco Industries

Quality Assurance Representatives





METTALURGICAL EXAMINATION

AFC LOT NO .:

23839

DATE MFG.: 3/18/2014

SAMPLE SIZE: 10

QTY MFG.: 49,800

PART NO.: AFC59F1032L

PROCUREMENT SPECIFICATION: NASM25027 Dec 2012

CONFORMS TO:

MS21059L3 per NASM1059 rev. 2, NAS686A3 rev. 13

MICRO EXAMINATION: The microstructure shows tempered martensitic grains. No decarburization or carburization was noted visually under 100X magnification. Mount shows flow lines are continuous and follow the general contour of the part as formed by the cold forming process. No indications of cracks, laps, seams or other defects were noted. Rockwell hardness HRC, Superficial 15-N, and Tukon micro-hardness Knoop / Vickers scale was performed. Material as mounted and inspected is satisfactory as inspected and conforms to specification requirements.

	NUT										
HARDNESS SAMPLE	HRC	15-N	KNOOP	VHN	ACCEPT REJECT						
1	34	77	341	336	ACC						
2	_ 34	77	341	336	ACC						
3	35	78	351	345	ACC						
4	34	77	342	336	ACC						
5	35	78	351	345	ACC						
6	_35	78	351	345	ACC						
7	34	77	342	335	ACC						
88	_34		341	335	ACC						
9	34	77	341	336	ACC						
10	35	78_	351	345	ACC						
11	#REF!	#REF!	#REF!	#REF!	#REF						
12	#REF!	#REF!	#REF!	#REF!	#REF!						
13	#REF!	#REF!	#REF!	#REF!	#REF!						
14	#REF!	#REF!	#REF!	#REF!	#REFI						
15	#REF!	#REF1	#REF!	#REF!	#REF!						
low	34	77	341	335	ACC						
avg.	34	77	345	339	ACC						
hìgh	35	78	351	345	ACC						

CONTROLLED

We hereby

Airfasco Industries Quality Assurance Representative:

EXAMINATION OF PRODUCT

AFC LOT NO.:

23839

DATE MFG.: 3/18/2014

SAMPLE SIZE: 10

QTY MFG.: 49,800

PART NO.: AFC58F1032L

CONFORMS TO: MS21059L3 per NASM1059 rev. 2, NAS688A3 rev. 13

PROCUREMENT SPECIFICATION: NASM25027 Dec 2012

Ħ	CHARACTERISTICS	MAX.	MIN.	SAMPLE 1	SAMPLE 2	SAMPLE 3	SAMPLE 4	SAMPLE 5	SAMPLE 6	CAREDIE			
1	"A" LENGTH	.948		.917"	.918 ⁿ	.919"	.917"	.919"	.918"	SAMPLE 7	.919"	SAMPLE 9	SAMPLE 1
2	"8" WIDTH	. 41 6	.290	.402"	.400"	.403"	.402"	.402°	,400°	.401"	.403"	.4D2"	.400"
3	"D" DIANTER	·	.194	.2201	.219"	.219"	.220"	.220"	.220"	.220"	.219"	.220"	.220"
4	"P" DIAMETER	.270	.250	.263"	.263"	.263°	.263"	.263"	,263ª	.263"	.263"	.263"	.263"
5	"H" HEIGHT	.250	•	.239*	.243"	.238°	.241"	.241°	.242"	.241"	.240°	.241"	.238"
6	"J" LOCATION	.690	.685	.688"	.688"	.688"	.688*	.688"	.688"	.588"	.688"	. 688 "	.688°
7	"K" DIAMETER	.103	.098	.099"	.099"	.099°	.099"	.099"	.099"	.099 ⁿ	.099°	.099°	.099"
8	"V" THICKNESS	.032	-	.025°	.026"	.026"	.026"	.026"	.026"	.026"	.026"	.026"	.026°
9	"F" LOCATION	•	.100	.106"	.106"	.106"	.106"	.106°	.106"	.106"	.106"	.106"	.106°
10	PRESENCE OF LOGO	-	-	ACC	ACC	ACC	ACC	ACC	ACC	ACC	ACC	ACC	ACC
11	THREADS /T/ .190-32 UNIC-38	-	-	ACC	ACC	ACC	ACC	ACC	ACC	ACC	ACC	ACC	ACC
12	BEARING SURFACE ROUGHNESS	< 125	-	60	60	60	60	60	60	60	60	60	60

Examination of product in accordance with NASM25027 1, Dec 2012.

Airfasco Industries

Quality Assurance Representative:

Time Wife -4

PAGE 7 OF ?

AIRFASCO INDUSTRIES QUALITY CONTROL FORM 1011N

CONTROLLED

CUSTOMER: Airfasco Industries, Inc.

CERTIFICATE OF COMPLIANCE

SUPPLIER: BERINGER PLATING, INC.

1211 DeValera Ave. Akron, OH 44310

330-633-8409 Fx 330-633-8447

	sales@betringerblating.com			
Beringer Invoice:	78801			
P.O. Number:	60742		·	
Part Number:	MS21059L3			
Lot Number:	23839-01			
Lot Quantity:	49,800	pcs		
Specification:	Cadmium Plate per AMS-QC Mercury Free Clause: No possibility exi			cessing or testing of parts on this contract
Coating Thickness:	.0003 inches			
Embrittlement Relief Baked:		375F W	ithin 1 Hour of Plati	ng.
nspection Level to ap 5-3 of MILSTD105i ASTM B602 Table II: Aircraft Braking Syste	D: 4 % 1.50%) }	: <u>x</u>	
Certified By:	James Beringer Jr. President	Berin	ger Js	Date: 2/13/2014





CERTIFICATION OF PROCESS

CUSTOMER:	CI	181	roi	ИF	R.
------------------	----	-----	-----	----	----

AIRFASCO INDUSTRIES, INC

2655 HARRISON AVE SW

CANTON OH 44706

THIS IS TO CERTIFY THAT BRITE METAL INC. HAS PROCESSED THE FOLLOWING MATERIAL IN ACCORDANCE WITH THE MOST WIDELY ACCEPTED METALLURGICAL PROCEDURE.

PO #: 60701

WEIGHT: 184

NO. BINS: 1

NO. PCS: 49,800

PN#: AFC59F-1032 ASSEM LOT#: 23839

MATERIAL#: 1050

BM ORDER NO: 165357

CORE HARD SPECS: HRC 33-35

PROCESS TO: AMS2759

DATE RECEIVED: 1/21/14

DATE SHIPPED:

HEAT TREATING TEST RESULTS

NUMBER OF SAMPLES: 3	
CORE HARDNESS: 34-35RC	
SURFACE HARDNESS: 34-35RC@.003	
CASE DEPTH:	
CORE HARDNESS AS QUENCHED:	

CONTROLLED

INSPECT	ror:	JC	
DATE:	1/2	4/14	

AIRFASCO Industries

2655 Harrison Avenue SW Canton, OH 44706

Nondestructive Testing Certification Wet Fluorescent Magnetic Particle Inspection Technique

Part Data

Part Number	Lot Number	Dimensions	Part Description
MS21059L3	23839	.190-32 UNJF-3B	NUT, SELF-LOCKING, PLATE, TWO LUG, FLOATING, LOW HEIGHT STEEL, 125 KSI Ftu, 450°F

Reference Data

Specification	Procedure Number	Acceptance Criteria
ASTM E1444-05	MT-1	No Cracks, NASM25027

Inspection Equipment Data

Model Number	Manufacturer	Serial Number
H-800 Retro	Magnaflux Corporation	91R00150

Inspection Material Data

Particles	Mfr	Batch No.	Carrier	Mfr	Batch No.
14A	Magnaflux	10G078	MG II	Magnaflux	11K065

* Technique Data

	Circ	ular Field	Longitudinal Field				
Type Current	Headshot Amps	Central Conductor Amps	Coil shot Amps	Coil Turns			
FWDC	N/A	250	N/A	5			

Particle application by the flow method, continuous technique

Demagnetization performed by the <u>AC Coil</u> method, Residual field +/- <u>3</u>

Inspection Results

Lot Size	Inspection Sample	Quantity accepted	Quantity rejected
	Size		
49800	32	32	0

Notes: Circular mag only per NASM25027

$-\Delta a$		·
Performed by / Level	Reviewed@Approved by:	Date
1/0/		3/14/14
D. SHOUP ASNT NOT LEVEL III	D. SHOUP AGNT ADT LIII #176608	



EVER UBE PRODUC S

TEST REPORT

DATE:

PRODUCT:

SPECIFICATION:

BATCH NUMBER:

DATE OF MANUFACTURE: MANUFACTURING SITE:

CUSTOMER P.O. #:

2/05/2014

Everlube[®] 620C

SAE AS5272E, Type I

PC-14506

2/05/2014

Peachtree City, GA

DATE OF

MAR 1 3 2015

EXPIRATION

CONTROLLED

TEST RESULTS

PARAGRAPH	TEST	REQUIREMENTS	RESULTS
3.3	Film Appearance	Pass	Pass
3.3	Film Thickness	All Specimens	All Specimens
		0.0003" - 0.0005" with no single readings less than 0.0002" or	0.0003" - 0.0005"
		greater than 0.0007".	
3.4.1	Film Adhesion (ASTM D-2510, Procedure A)	Pass Per Spec	Pass
3.4.4	Endurance Life	250 Min. Avg.	Test # $1 = 290 \text{ Min.}$
	(ASTM D-2625, Procedure A)	None < 210 Min.	Test # $2 = 255$ Min.
	,	•	Test $#3 = 275 \text{ Min.}$
		•	Test $#4 = 270 Min.$
	- 	<i>,</i> .	Test Average = 273 Min.
3.4.5	Load Carrying Capacity	2500 Lbf. Avg.	Test # $1 = 2750$ Lbf.
•	(ASTM D-2625, Procedure B)	None < 2250 Lbf.	Test $#2 = 2750 Lbf$.
	,		Test Average = 2750 Lbf.
3.4.7	Sulfurous Acid-Salt Spray	Pass 4 Cycles	Pass
3.4.9	Solids Content	40% Minimum	40.1 %

CERTIFICATE OF CONFORMANCE

EVERLUBE PRODUCTS HEREBY CERTIFIES THAT THIS PRODUCT CONTAINS NO GRAPHITE OR POWDERED METALS AND HAS BEEN EVALUATED AGAINST THE QUALITY CONFORMANCE REQUIREMENTS OF SAE AS5272, TYPE IN MADE, CONFORMS TO THE REQUIREMENTS OF THAT SPECIFICATION.

Sworn to and subscribed before me

Public

CERTIFIED BY:

Tim Murpky

Quality Assurance Technician

Carl H. Van Acker

Quality Assurance Manager

15May08 6:38

TEST

CERTIFICATE

No: CLE 213908

Sold By: THREE D METALS, INC. 5462 INNOVATION DRIVE VALLEY CITY, OHIO 44280 Tel: 330 220 0451 Fax: 330 220 0471

P/O No W25030-02 Rel \$/0 No CLE 10429-001 B/L No CLE 119616-003

15May08 Sho

CERTIFICATE of ANALYSIS and TESTS

Cert. No: CLE 213908 15Mgy08

Port No 1902504064 C1050 C.R. SPRING STEEL ANNEALED .0250 Nom X 4.0600"

3,705

Heat Number 280353

Tag No 534597

HRB=<88>/BECAR=<.00">/ELONG=<28.5%>/TSps1=<73.000ps1> YSps1=<57.000ps1>/"N"=<.22>/REF=<5085F>

Heat Number 280353

*** Chemical Anglysis ***
ORIGIN=<US> C=<.52> Mn=<.730> P=<.015> S=<.004> Si=<.249>
Cu=<.118> Ni=<.055> Cr=<.163> Ho=<.017> Al=<.035> N=<.009>
V=<.002> Mb=<.001> Ti=<.003> Sb=<.004> ASTM=<A6B2> *ASTM=<A6B4>
SAE=<J403>

THIS IS TO CERTIFY THAT THE CHEMICAL ANALYSIS AND/OR PHYSICAL TEST RESULTS EXHIBITED HEREIN ARE CORRECT. AS CONTAINED WITHIN THE RECORDS OF THE COMPANY.

QUALITY MANAGER

ohn Bakehu. Dr John Bokuin . Jr.

CONTROLLED

1 Lost -Page:

GENIE FASTENER MFG. CO.

35 CARLOUGH RD. UNIT 1 / BOHEMIA NY 11716 Phone: 631.737.4022 / Fax: 631.737.4028 QUALITY MANUFACTURED FASTENERS

01/28/14

EAST COAST AVIATION SUPPLIES 399 EAST DRIVE MELBOURNE, FL 32904

WE HEREBY CERTIFY THAT THE BELOW ITEMS WERE MANUFACTURED AND INSPECTED IN ACCORDANCE WITH REQUIRED SPECIFICATIONS.

PART NUMBER	PURCHASE ORDER	DESCRIPTION
MS35207-268 NASM35207-268 Rev. 2	67948	10-32 x 1.250 Pan Head Machine Screw. 1022 Steel Per AIR4127. Cad Plated per QQ-P-416 /Type II, Class 3.

QUANTITY

LOT NUMBER

54,440 Pcs.

13-313

HEAT NUMBER: 10269440 / WIRE TECH, INC.

CHEMICAL ANALYSIS: COPY OF ORIGINAL WIRE CERTIFICATION ATTACHED

TENSILE RESULTS: 1580 (1,200 Lbs. min) 1600 1620

1620 1600

WIRE IS DFARS 252.225-7014 ALT 1 COMPLIANT

VERY TRULY YOURS.

GENIE FASTENER MFG. CO.

Mary Richardson Quality Assurance